

Application No. 10/649633  
Amendment dated 10 November 2004

Page 2 of 18

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

1. (Currently Amended) A method for applying an authentication material to a printed article, the method comprising, after applying ink to the article, dispensing the authentication material in powder form over the article before the ink is fully cured, the authentication material comprising at least one of: a fluorescent material; a magnetic material; a DNA containing biological material; and a radio frequency absorbing material.
2. (Previously Presented) A method according to claim 1 wherein dispensing the authentication material in powder form comprises simultaneously dispensing a spray powder for preventing printed articles from adhering to other objects and wherein dispensing the authentication material and dispensing the spray powder are performed by the same equipment.
3. (Previously Presented) A method according to claim 2 comprising mixing the authentication material with the spray powder prior to dispensing the authentication material and prior to dispensing the spray powder.
4. (Previously Presented) A method according to claim 1 wherein the authentication material is light-activated.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 3 of 18

5. (Previously Presented) A method according to claim 1 wherein the authentication material comprises magnetic authentication material.
6. (Previously Presented) A method according to claim 1 wherein the authentication material comprises biological authentication material.
7. (Currently Amended) A method for preparing an authenticatable printed article, the method comprising: applying ink to the printed article; and, before the ink applied to the printed article is cured, applying a powder comprising an authentication material atop the ink, the authentication material comprising at least one of: a fluorescent material; a magnetic material; a DNA containing biological material; and a radio frequency absorbing material.
8. (Currently Amended) A method according to claim 6 comprising allowing the powder to adhere to the uncured ink.
9. (Previously Presented) A method according to claim 7 wherein the powder comprising the authentication material comprises a mixture of the authentication material with a spray powder for preventing printed articles from adhering to other objects.
10. (Previously Presented) A method according to claim 9 wherein applying ink to the printed article and applying the powder comprising the authentication material atop the ink are performed in a printing press.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 4 of 18

11. (Previously Presented) A method according to claim 10 wherein applying the powder comprising the authentication material atop the ink is performed by a spray powder system associated with the printing press.
12. (Previously Presented) A method according to claim 9 wherein the spray powder and the authentication material both comprise particles having dimensions in a range of 20-50 $\mu$ m.
13. (Previously Presented) A method according to claim 8 wherein the authentication material comprises at least one of: a magnetic powder detectable by a magnetizable pick up coil; a fluorescent powder detectable via application of ultraviolet light; a biological powder detectable via biological testing; and a radio frequency absorbing powder detectable via a unique radiation absorption signature.
14. (Previously Presented) A method according to claim 7 comprising curing the ink and thereby bonding the ink to the authentication material.
15. (Previously Presented) A method according to claim 14 wherein, after curing the ink, a density of the authentication material on a surface of the printed article is about 0.3mg/m<sup>2</sup>.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 5 of 18

16. (Currently Amended) A method for preparing an authenticatable printed article, the method comprising:  
mixing an authentication material with a spray powder for preventing printed articles from adhering to other objects to form a powder mixture;  
applying ink to the printed article; and  
prior to the ink curing on the printed article,  
applying the powder mixture to the printed article atop the ink;  
wherein the authentication material comprises at least one of: a fluorescent material; a magnetic material; a DNA containing biological material; and a radio frequency absorbing material.
17. (Previously Presented) A method according to claim 16 comprising allowing the powder mixture to adhere to the uncured ink.
18. (Previously Presented) A method according to claim 17 wherein applying ink to the printed article and applying the powder mixture to the printed article atop the ink are performed in a printing press.
19. (Previously Presented) A method according to claim 18 wherein applying the powder mixture to the printed article atop the ink is performed by a spray powder system associated with the printing press.
20. (Previously Presented) A method according to claim 17 wherein the spray powder and the authentication material both comprise particles having dimensions in a range of 20-50 $\mu$ m.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 6 of 18

21. (Previously Presented) A method according to claim 17 wherein the authentication material comprises at least one of: a magnetic powder detectable by a magnetizable pick up coil; a fluorescent powder detectable via application of ultraviolet light; a biological powder detectable via biological testing; and a radio frequency absorbing powder detectable via a unique radiation absorption signature.
22. (Previously Presented) A method according to claim 16 comprising curing the ink and thereby bonding the ink to the authentication material.
23. (Previously Presented) A method according to claim 22 wherein, after curing the ink, a density of the authentication material on a surface of the printed article is about 0.3mg/m<sup>2</sup>.
24. (Currently Amended) A powder mixture for authentication of printed articles, the powder mixture comprising a mixture of an authentication material and a spray powder for preventing printed articles from adhering to other objects wherein the authentication material and the spray powder comprise particles having dimensions in a range of 20-50µm, wherein the powder mixture is applied over ink that has been printed on the printed articles prior to the ink being cured and wherein the authentication material comprises at least one of: a fluorescent material; a magnetic material; a DNA containing biological material; and a radio frequency absorbing material.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 7 of 18

25. (Previously Presented) A powder mixture according to claim 24 wherein the authentication material comprises at least one of: a magnetic powder detectable by a magnetizable pick up coil; a fluorescent powder detectable via application of ultraviolet light; a biological powder detectable via biological testing; and a radio frequency absorbing powder detectable via a unique radiation absorption signature.
26. (New) A method according to claim 1 wherein the authentication material comprises a fluorescent material.
27. (New) A method according to claim 1 wherein the authentication material comprises a DNA containing biological material.
28. (New) A method according to claim 1 wherein the authentication material comprises a radio frequency absorbing material detectable via a unique radiation absorption signature.
29. (New) A method according to claim 7 wherein the authentication material comprises a fluorescent material.
30. (New) A method according to claim 7 wherein the authentication material comprises a DNA containing biological material.
31. (New) A method according to claim 7 wherein the authentication material comprises a radio frequency absorbing material detectable via a unique radiation absorption signature.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 8 of 18

32. (New) A method according to claim 7 wherein the authentication material comprises a magnetic authentication material.
33. (New) A method according to claim 16 wherein the authentication material comprises a fluorescent material.
34. (New) A method according to claim 16 wherein the authentication material comprises a DNA containing biological material.
35. (New) A method according to claim 16 wherein the authentication material comprises a radio frequency absorbing material detectable via a unique radiation absorption signature.
36. (New) A method according to claim 16 wherein the authentication material comprises a magnetic authentication material.
37. (New) A powder mixture according to claim 24 wherein the authentication material comprises a fluorescent material.
38. (New) A powder mixture according to claim 24 wherein the authentication material comprises a DNA containing biological material.
39. (New) A powder mixture according to claim 24 wherein the authentication material comprises a radio frequency absorbing material detectable via a unique radiation absorption signature.

Application No. 10/649633  
Amendment dated 10 November 2004

Page 9 of 18

40. (New) A powder mixture according to claim 24 wherein the authentication material comprises a magnetic authentication material.